

Applicants thank Examiner Brown for a helpful telephone interview with the undersigned and Dr. Dally in which the invention and cited references were discussed. Based on that interview and the following comments, reconsideration of the outstanding rejections is respectfully requested.

The present invention is directed to a crosspoint switch which, as illustrated in Fig. 16, includes plural input lines, such as lines in0-in71, coupled to plural output lines, such as out0-out71, through crosspoints xp. The invention is directed to use of low swing signals on those input buses and output buses, and more specifically to novel crosspoints xp which selectively pass a signal from a low swing input bus to a low swing output bus. In particular, as recited in claim 2 and as illustrated in Fig. 20, each crosspoint includes an amplifier.

The primary reference, U.S. patent 4,914,429 to Upp, shows a crosspoint switch in Fig. 2. The crosspoints are AND gates 65 coupled to OR gates 67 which would necessarily require full swing inputs and provide full swing outputs. There is no suggestion of replacing those gates with an amplifier circuit which would enable the selective coupling of low swing inputs to low swing outputs.

Bridgewater has been cited "to show the use of low swing voltage to drive clock and data lines." It should first be noted that Bridgewater includes a transmitter 102 which drives a low swing signal and receivers 104 and 108 which receive low swing signals, but neither receives a low swing signal and then forwards that low swing signal on output lines. The same can be said of the other low swing references which have been cited. More significantly, however, even if low swing regenerative amplifiers exist, there is no suggestion in the prior art of using such an amplifier at the crosspoints of a crosspoint switch. As stated in the MPEP, Section 2143.01, page 2100-125, left column, "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." In this case, there is no suggestion of combining Bridgewater or any other low voltage swing reference with Upp or any other crosspoint switch reference to provide a crosspoint switch in which the crosspoints operate

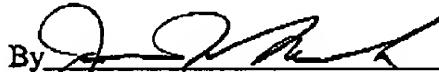
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on low voltage swing inputs and drive low voltage swing outputs. In particular, there is no suggestion of providing an amplifier at a crosspoint (claims 2, 10 and 20) or more particularly a clocked regenerative amplifier (claims 4, 12 and 14) in combination with a low swing driver circuit (claims 3 and 12).

In view of the above remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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